WATCH OUT FOR THOSE OTHER WINTER WOES -- TRENCH FOOT AND CHILBLAINS

V Corps Safety Office release

Trench foot is a pretty unpleasant sounding name for a … well … pretty unpleasant winter malady. But the good news is that it's one that can be avoided with minimal effort.

Trench foot is caused by prolonged exposure of the feet to cool, wet conditions. Actually, while it is usually associated with winter, trench foot can occur at temperatures as high as 60 degrees Fahrenheit if the feet stay constantly wet.

What happens is this: Because wet feet lose heat 25 times faster than dry feet, the body's response to wet feet is to constrict peripheral blood vessels to slow down overall body heat loss. As a result, skin tissue begins to die due to lack of oxygen and nutrients and buildup of toxins.

When this happens, the skin initially turns red and becomes numb, tingles with pain and itches. As trench foot progresses, the skin becomes pale and mottled and finally dark purple, gray or blue. At this point affected tissue begins to die and slough off.

In severe cases trench foot can involved the toes, heel or entire foot. If circulation is impaired for more than six hours, tissue will be permanently damaged. If it is impaired for more than 24 hours the victim could lose the whole foot.

Trench foot causes permanent damage to the circulatory system, a condition known as Reynaud's Phenomenon that makes the victim more prone to cold injuries in that area. A similar phenomenon can happen to the hands if they remain wet for long periods of time.

Treatment for trench foot includes careful washing and trying of the feet, as well as re-warming them gently and elevating them slightly. Tissue affected by trench foot can be damaged by walking on it; if victims must be moved, they should be carried by litter.

But the best protection against trench foot is prevention. Here are some tips to help avoid becoming a victim:

-- Wear appropriate footwear that keeps feet dry.

-- Check feet regularly to see if they are wet. This is particularly true if you are wearing "vapor barrier" socks, which can cause feet to become wet in all but the most extreme cold. If feet are wet due to sweating or immersion, stop and dry them and put on dry socks. Wipe moisture out of the inside of footwear. Apply foot powder with aluminum hydroxide if possible.

-- If possible, elevate and massage feet periodically.

-- Change socks at least once a day.

-- Do not sleep wearing wet socks.

-- Avoid tight socks that can further inhibit circulation.

Chilblains -- also known as perniosis or pernio -- are red, burning, itching inflammations of the skin similar to trench foot, caused by the swelling of small blood vessels following repeated exposure of bare skin to temperatures below 60 degrees Fahrenheit. In severe cases skin will blister or ulcer.

Chilblains occur most frequently on cheeks, ears, fingers and toes. A chilblain can also appear on a pressure-bearing area of the skin, such as a bunion. They normally appear a few to several hours after exposure to severe cold.

Women and children are most susceptible to chilblains, but anyone who has poor circulation, an inadequate diet, or an allergic response to low temperatures may also be vulnerable.

Prevention of chilblains is simply to keep warm and avoid exposure to the cold. Treatment includes re-warming affected areas; cleaning, treating and dressing any blisters or ulcers that form, and avoiding re-exposing affected areas to the cold. Doctors may also recommend steroid creams to relieve itching and swelling, and medications to improve circulation. The condition usually clears up within seven to 14 days.